

# **Mission Analysis: Giving Commanders What They Need**

**A Monograph  
by  
MAJ James M. Loffert  
U.S. Army**



**School of Advanced Military Studies  
United States Army Command and General Staff College  
Fort Leavenworth, Kansas  
First Term AY 01-02**

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

MAJ James M. Loffert

Title of Monograph: Mission Analysis: Giving Commanders What They Need

Approved by:

\_\_\_\_\_  
LTC Robert C. Johnson

Monograph Director

\_\_\_\_\_  
Robert H. Berlin, Ph.D.

Professor and Director  
Academic Affairs,  
School of Advanced  
Military Studies

\_\_\_\_\_  
Philip J. Brookes, Ph.D.

Director, Graduate Degree  
Program

## **Abstract**

“Mission Analysis: Giving Commanders What They Need” by MAJ James M. Loffert, U.S. Army, 57 pages.

The purpose of this monograph is to answer the research question: does the current process for executing mission analysis give commanders the information they need to develop timely, relevant, and constructive commander’s intent and commander’s guidance.

This paper focused on the first two aspects of battle command: visualization and description. There are problems with the doctrinal mission analysis process that hinders commanders and their staffs in visualizing and describing an operation. The over-arching problem occurring during execution of the current mission analysis process is that staffs are not giving commanders what they need to complete their required deliverables at the conclusion of the mission analysis brief: timely, relevant, and constructive initial commander’s intent and commander’s planning guidance.

In its current form, the mission analysis process fails to address three fundamental problems during the execution of mission analysis. First, it does not take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs to present the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance.

Although solving the problem of inexperience is beyond the scope of this paper, the proposal does recommend several methods commanders and staffs can use to mitigate for lack of relevant experience. As for the other two problems, the mission analysis construct is good, but not complete. The current doctrine for mission analysis is incomplete in four areas: it fails to fully convey understanding to staffs as to what mission analysis is designed to do; it does not adequately explain how to frame a problem for a commander and staff in order to give greater context to situational understanding; it does not adequately discuss the dynamics of the mission analysis process in interaction with various commander personalities; and it does not adequately suggest how to assist a commander in getting information before mission analysis while he is developing his intent and guidance.

The future FM 5-0 should dedicate a section to explain the research on how commanders make decisions when faced with situations they recognize and those they do not. By understanding how a commander makes decisions in naturalistic environments, a staff can be more efficient in finding and presenting the type of information he needs in order to complete his pattern recognition.

The future FM 5-0 should describe how the staff must frame the problem through context for the commander during mission analysis. Adequately framing the problem through context requires describing the purpose of the operation over time in relation to space and resources.

The future FM 5-0 should describe the dynamics of commander-staff interaction and their impact on mission analysis. The staff should understand that they must adapt to the commander, and not the other way around. The staff must discover how their commander expresses himself, receives information, and interprets information.

The future FM 5-0 should describe the nature and need for commander-staff collaborative planning. The doctrine should address the benefits of information sharing between the commander and staff before the mission analysis brief.

This paper has not only identified problems with the current doctrinal process, but it has provided solutions to mitigate them. If the proposal of this paper is implemented in the future FM 5-0 (Army Planning and Orders Production) the U.S. Army could greatly improve the effectiveness of the mission analysis process and improve shared battlefield visualization and description by commanders and their staffs.

# TABLE OF CONTENTS

Chapter 1: Introduction.....	1
Overview.....	1
Background of the Problem.....	5
Defining Terms.....	7
Evaluation Criteria.....	9
Chapter 2: Mission Analysis in the MDMP.....	13
Theory and Doctrine.....	13
U.S. Army Doctrinal Approach.....	16
Application of the Mission Analysis Doctrine.....	18
The Eleven Key “Understandings” of Mission Analysis.....	20
Chapter 3: Mission Analysis in the Field.....	23
Basic Trends in Mission Analysis.....	23
Receipt of Mission.....	25
Specific Trends in Mission Analysis.....	26
Chapter 4: Problems with the Current Mission Analysis.....	32
Failure to Meet Evaluation Criteria.....	32
Problems with Mission Analysis.....	33
Convey Understanding on Mission Analysis Design.....	36
Framing the Problem.....	36
Interaction with Commanders.....	37
Collaborative Planning.....	38
Impact of the Problems.....	40
Chapter 5: A Proposal.....	42
Research Question Answered.....	42
Mitigating Lack of Relevant Experience.....	43
Explaining the Mission Analysis Design.....	45
Framing the Problem through Context.....	47
Explaining the Impact of Commanders.....	49
Collaborative Planning with the Commander.....	50
Conclusion.....	51
Bibliography.....	54

## CHAPTER ONE

# Introduction

## Overview

The current U.S. Army doctrinal process for executing mission analysis, as outlined in Field Manual (FM) 101-5 (Staff Organization and Operations<sup>1</sup>), does not give commanders the information they need to develop relevant and constructive commander's intent and commander's guidance. The mission analysis process is a solid, analytical, doctrinal approach, however, the assumptions made about the personnel executing it, the manner in which U.S. Army doctrine describes the process, and the method it uses for execution are inadequate to fully assist commanders and staffs in developing a shared vision of the requirements for the upcoming operation.

In its current form, the mission analysis process fails to address three fundamental problems that commanders and staffs struggle with during the execution of mission analysis. First, it does not take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs to present the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance.

The purpose of this monograph is to answer the research question: does the current process for executing mission analysis give commanders the information they need to develop timely,

---

<sup>1</sup> The U.S. Army intends to replace the current FM 101-5 with FM 5-0 (Army Planning and Orders Production). At the time of this writing, FM 5-0 is in initial draft. Review of the initial draft of FM 5-0 shows very little change to the current MDMP and mission analysis in particular. A secondary intent of this monograph is to influence the writing of the final draft of FM 5-0, which is due out in June/July 2002.

relevant, and constructive commander's intent and commander's guidance. That is, in today's Army, are staffs giving commanders what they need to complete their required deliverables at the conclusion of the mission analysis brief, timely, relevant, and constructive intent and guidance, or are they conducting a mission analysis and brief that does not increase the commander's understanding of the situation beyond what his intellect and experience already know?

This monograph answers the research question by first stating the conclusion in the opening of this chapter and then laying out the methodology of how it answers the research question. Next, it discusses the background of the problem, defines the terms of the discussion, and then defines the evaluation criteria of the research question. The evaluation criteria are what this paper uses to measure the level of effectiveness of the mission analysis process to assist the commander's development of timely, relevant, and constructive initial intent and guidance. Further chapters build the discussion by answering the following four questions central to the main argument: what is the Army's current doctrinal process to conduct mission analysis and assist the commander in developing his intent and guidance; how are units executing mission analysis and developing commander's intent and guidance during field training and real world operations; what are the problems with the current process of mission analysis and commander's intent/guidance development; and finally, what can be done about these problems.

Following the overview, chapter one continues with a discussion on the background of the problem with the current mission analysis process, discusses why the problem is so significant, explains definitions of key terms, and then concludes with a section that defines the evaluation criteria and how they are used to answer the research question. Addressing these three issues facilitates a common understanding of major concepts and establishes the context for a consistent argument throughout the subsequent chapters.

Chapter two, mission analysis in the MDMP, answers the question of "what is the U.S. Army's current doctrinal process to conduct mission analysis and assist the commander in developing his intent and guidance?" It describes the theoretical and doctrinal roots of mission

analysis to determine what the process is designed to do. The chapter continues by showing how the U.S. Army applies the theory and doctrine in the form of the mission analysis within the MDMP. It establishes the premise that an analytical and doctrinal approach to decision making is sound and that the U.S. Army uses such an approach in its mission analysis. It also discusses how mission analysis is designed to assist a commander develop battlefield visualization, and what the role of the staff is in the process. The chapter concludes with a discussion on the products of the mission analysis in order to establish context for chapter three on commander and staff trends observed during the execution of mission analysis.

Chapter three, mission analysis in the field, answers the question of “how are units executing mission analysis and developing the commander’s initial intent and guidance in both training and real world operational environments?” By describing the recent trends observed from the U.S. Army’s Combat Training Centers (CTCs) and personal real world operational accounts, the chapter establishes what is occurring in tactical units throughout the U.S. Army in regard to the execution of mission analysis and the development of the commander’s intent and guidance. In addition, a short discussion on the varied nature of “mission receipt” establishes that the observed trends are consistent in numerous environments and conditions and the central argument of this monograph is valid whether dealing with training or real world operations.

Chapter four, problems with the current mission analysis, answers the question of “what are the problems with the current process of mission analysis and development of the commander’s intent and guidance?” By examining the trends, discussed in chapter three, in relation to the commander’s intent/guidance evaluation criteria outlined in chapter one, the evidence shows that the current mission analysis process is failing the evaluation criteria in several areas. These failures point to three fundamental problems with the execution of the mission analysis process. The chapter examines these problem areas in detail and concludes with a discussion of the impacts if no action is taken to mitigate the problems identified.

Chapter five, a proposal, presents a solution to the identified problems. The chapter addresses the three fundamental problems identified in chapter four and provides viable solutions to either solve or mitigate the problems. The conclusion at the end of the chapter summarizes the main argument of this monograph and places the key points of each chapter in context with the answer to the research question.

The foundation of this paper rests on a central premise: unit commanders are committed professionals who know their jobs and staffs should focus on the specific and unique needs of these commanders. The existence of a few unprofessional/inadequate commanders or unit staffs that focus on process and not required products does not invalidate the central argument of this paper. Although this paper's research focuses on battalion and brigade level units, the central themes can apply to any level of organization.

The first portion of this premise is key. To achieve the rank of Lieutenant Colonel or above in the U.S. Army and gain command of a battalion or larger organization is a very selective process and difficult accomplishment. Those who achieve this distinction have shown that they are talented professionals, have the proper education for command, and are experienced enough to manage the problems of such an organization and command its personnel and resources with success. Given adequate information about a situation, the U.S. Army expects these leaders to know what is best for their organization and how to leverage the greatest chance for mission success.

The second half of the premise is equally important. A commander's staff should focus on what their commander needs, and what will be required to achieve those needs, in order to facilitate those decisions that will ultimately lead to effective plans. FM 101-5 (Staff Organization and Operations) states the staff's effort during the Military Decision Making



Process (MDMP) has one objective: to collectively integrate information with sound doctrine and technical competence to assist the commander in his decisions, leading ultimately to effective plans.<sup>2</sup>

## **Background of the Problem**

Battle command is the exercise of command in operations against a hostile, thinking enemy. It applies the leadership element of combat power. Battle command is principally an art that employs skills developed by professional study, constant practice, and considered judgment. Commanders, assisted by the staff, visualize the operation, describe it in terms of intent and guidance, and direct the actions of subordinates within their intent. Commanders direct operations in terms of the battlefield operating systems (BOS). They directly influence operations by personal presence, supported by their command and control (C2) system.<sup>3</sup>

This paper focuses on the first two aspects of battle command: visualization and description. The central argument of this paper states that there are problems with the doctrinal process that hinders commanders and their staffs in visualizing and describing an operation. The next few paragraphs define the over-arching problem, discusses its background, and outlines the ramifications of failure in mission analysis.

The over-arching problem occurring during execution of the current mission analysis process is that staffs are not giving commanders what they need to complete their required deliverables at the conclusion of the mission analysis brief: timely, relevant, and constructive initial commander's intent and commander's planning guidance. Far too often, staffs conduct a mission analysis and brief that does not increase the commander's understanding of the situation beyond what his intellect and experience already know. Commanders are not getting the information that they should from a leveraging of the intellectual and physical capabilities of their staff.

---

<sup>2</sup> *FM 101-5, Staff Organization and Operations*, 5-2.

<sup>3</sup> Preceding paragraph: *FM 3-0, Operations*, 5-1.

Personal real world operational accounts (stability and support operations to major war) from former commanders (ranging in ranks from lieutenant colonel to four-star general),<sup>4</sup> observations and After Action Reviews (AARs) from the Combat Training Centers (Battle Command Training Program-BCTP; the National Training Center-NTC; the Joint Readiness Training Center-JRTC; and the Combat Maneuver Training Center-CMTC), give evidence that more often than not, at brigade level and below, the following events occur during the execution of mission analysis:

- The commander conducts his own commander's estimate with little input from the staff.
- The commander does not have much time to reflect on many of the detailed aspects of the staff's work/estimates up to this point in the MDMP and does not leverage the intellectual abilities of the staff to provide what he needs to expand his visualization of the situation.
- The commander receives the mission analysis brief from the staff, makes few, if any, changes to his own estimate, and then issues his intent and guidance to the staff to facilitate COA development.

Often times the mission analysis brief provides little substance to directly assist the commander in writing his intent and guidance. Instead, the mission analysis brief focuses more on assisting the staff in preparing for the next step in the MDMP; COA development. Commanders are not benefiting from the full potential of an analytical and doctrinal mission analysis process.

The American Heritage Dictionary defines the word "process" as, "a series of steps, actions, or operations used to bring about a desired result; a series of natural changes by which something passes from one condition to another." In U.S. Army doctrinal context, the MDMP is a series of analytical steps or actions used to develop estimates, plans, and orders; a series of changes by which an idea/concept passes from receipt or anticipation of a new mission to an operations plan or order to subordinates.<sup>5</sup> It provides a logical sequence of decision and interaction between the commander and staff. The MDMP is a means to an end: its value lies in the result, not

---

<sup>4</sup> The author conducted personal interviews with former battalion and brigade commanders who had real world operational experience in order to go beyond the CTC training experiences. The information gathered was used to support the discussions on mission analysis in the field and problems with the current process of mission analysis.

<sup>5</sup> *FM 101-5, Staff Organization and Operations*, 5-1.

the process.<sup>6</sup> However, the process hinges on the commander's ability to visualize and describe the operation.

If the commander does not adequately visualize the battlefield and define the tactical problem correctly, his stated intent, guidance, and future decisions will be discordant with reality. A plan guided and crafted outside of reality is doomed to fail when that plan and reality meet on the battlefield. A staff's first and most significant opportunity to assist the commander in making sound decisions that will eventually lead to an executable course of action (COA), begins with mission analysis.

The purpose of mission analysis is to assist the commander in understanding the friendly situation, enemy situation, the terrain, and the desired endstate in order to develop an overall intent for the operation and for the commander to issue guidance to focus staff activities in planning the operation. It is imperative that the commander and staff "get it right" concerning mission analysis. The ramifications of failure in this step of the MDMP will be magnified as the commander and staff continue through the decision making process.

## **Defining Terms**

Misunderstanding often occurs when people discuss a subject unknowingly from two different viewpoints. Taking the time to define the terms of a discussion will often lead to less debate on irrelevant misunderstandings and more time spent analyzing the real issues at hand. "Defining terms" provides a discussion working definitions of the various key terms and facilitates a common understanding of the subject. It also adds context to the various topics, germane to the argument, throughout the discussion.

This section defines the key terms central to the research question: mission analysis, mission analysis brief, battlespace, commander's intent, and commander's guidance. A subsequent section deals directly with defining the terms of the evaluation criteria.

---

<sup>6</sup> FM 3-0, *Operations*, 6-4.

FM 101-5 states “mission analysis” allows the commander to begin his battlefield visualization and results in a defined tactical problem and beginning the process of determining feasible solutions.<sup>7</sup> Mission analysis, the second step in the MDMP consisting of seventeen steps (not necessarily sequential), concludes with the commander issuing his intent for the operation and guidance for planning, and the staff issuing another warning order to subordinate and supporting units.

FM 101-5 states the “mission analysis brief” focuses on relevant conclusions reached as a result of the mission analysis. This helps the commander and staff develop a shared vision of the requirements for the upcoming operation. The mission analysis briefing is given to both the commander and the staff. This is often the only time the entire staff is present, and the only opportunity to ensure that all staff members are starting from a common reference point.<sup>8</sup>

Upon receipt of a mission, commanders consider their “battlespace” and conduct a mission analysis that results in their initial vision, which they continually confirm or modify. Battlespace is the environment, factors, and conditions commanders must understand to successfully apply combat power, protect the force, or complete the mission.<sup>9</sup> Commanders use the factors of METT-TC (Mission, Enemy, Terrain and weather, Troops and support available, Time available, and Civil considerations), elements of operational design, staff estimates, input from other commanders, and their experience and judgment to develop their vision. This framing of the battlespace takes place during mission analysis.<sup>10</sup>

FM 3-0 (Operations) states the “commander’s intent” is a clear, concise statement of what the force must do and the conditions the force must meet to succeed with respect to the enemy, terrain, and the desired end state. Commanders express their vision for an operation as the commander’s intent. Intent, coupled with mission, directs subordinates toward mission

---

<sup>7</sup> FM 101-5, *Staff Organization and Operations*, 5-5.

<sup>8</sup> Preceding paragraph: FM 101-5, *Staff Organization and Operations*, 5-9.

<sup>9</sup> FM 3-0, *Operations*, 4-20

<sup>10</sup> Preceding paragraph: FM 3-0, *Operations*, 5-3.

accomplishment in the absence of orders. When significant opportunities appear, subordinates use the commander's intent to orient their efforts. Intent includes the conditions that forces meet to achieve the end state. Conditions apply to all courses of action. They include the tempo, duration, effect on the enemy, effect on another friendly force operation, and key terrain. The staff and subordinates measure the plans and orders that transform thought to action against the commander's intent.<sup>11</sup>

The "commander's guidance" is information from the commander that provides the staff with enough additional guidance (preliminary decisions) to focus staff activities in planning the operation.<sup>12</sup> This planning guidance focuses on the essential tasks supporting mission accomplishment. From their intent (vision), commanders develop and issue planning guidance, which may be either broad or detailed, as circumstances dictate. However, it conveys the essence of the commander's vision. Commanders attune the staff to the broad outline of their vision, while still permitting latitude for the staff to explore different options.<sup>13</sup>

Whether one agrees or disagrees with the definitions of the terms above, these are the working definitions this monograph uses to discuss and answer the research question. The definitions of these terms are doctrinally based and are essential to understanding the relation of the findings to the evaluation criteria

## **Evaluation Criteria**

The evaluation criteria are what this paper uses to measure the level of effectiveness of the mission analysis process to assist the commander develop his intent and guidance. By examining and comparing the evidence of the observed trends in mission analysis execution to the commander's intent/guidance evaluation criteria, one can determine the level of effectiveness of the process in assisting commanders develop intent and guidance. By analyzing this level of

---

<sup>11</sup> Preceding paragraph: *FM 3-0, Operations*, 5-14.

<sup>12</sup> *FM 101-5, Staff Organization and Operations*, 5-10.

<sup>13</sup> Preceding three sentences: *FM 3-0, Operations*, 5-15.

effectiveness, one can discuss the problems and impacts associated with the mission analysis process in relation to the research question.

This section defines the key adjectives (timely, relevant, and constructive) used to describe commander's intent and commander's guidance from the research question and lists the four evaluation criteria used to measure the effectiveness of the mission analysis process. The section not only defines the terms, but also places them in context with their development by the commander during the mission analysis process and the previously defined terms of "commander's intent" and "commander's guidance."

A commander's intent that is "timely", "relevant", and "constructive" is a commander's vision expressed in a clear, concise statement, given at a suitable or opportune moment, to the point with the matter at hand, and useful/helpful to staff and subordinate planning.<sup>14</sup> Like the commander's intent, commander's guidance that is timely, relevant, and constructive is information from the commander given at a suitable or opportune moment, to the point with the matter at hand, and useful/helpful in staff and subordinate planning.

A "suitable" or "opportune moment" for a staff or subordinate unit to receive the commander's intent and guidance is before they begin intensive COA planning.<sup>15</sup> Planners must develop the subsequent COAs within the context of the commander's intent for operations and his

---

<sup>14</sup> The American Heritage Dictionary defines the words "timely", "relevant", and "constructive" as: timely – "occurring at a suitable or opportune moment"; relevant – "having to do with the matter at hand; to the point"; constructive – "useful; helpful".

<sup>15</sup> At higher headquarters level, where staffs use the Joint Operation Planning and Execution System (JOPES) deliberate planning process or the crisis action planning process, the dynamic is different. Due to the complexity of operations and the increased intertwining of the other instruments of national power (diplomatic, informational, and economic) the staff may find that the situation is extremely nebulous and guidance nearly non-existent. At these levels, the staff may be forced to discern numerous absent variables that are often present at lower tactical levels of command. The staff can have a major impact on influencing the amorphous intent and guidance stemming from the National Command Authority (NCA). In order to produce the required deliverables to the NCA according to JOPES and assist the commander in defining the problem and visualizing the battlefield, staffs will find they must conduct mission analysis, COA development, and even preliminary COA analysis (war-gaming) before the mission analysis brief. The preliminary COA analysis represents the reciprocal process necessary to conduct a FAS test on the national intent, national aim, military endstate, force structure, command relationships, etc. This concept was a major lesson learned during the SAMS, December 2001, Pacific War Practicum AAR developed by MAJ Keith Barclay.

guidance for future planning. Even if the staff generates ideas that are not aligned with the commander's vision, they still need his intent and guidance to compare these ideas against. This is not to say that planning ceases while the commander develops his intent and guidance, but COAs created in disregard of the commander's intent for operations, or planning that is not in accordance with the commander's guidance, is potentially misguided effort, sometimes even wasted effort.

A suitable and opportune moment is also one in which the subordinate headquarters has adequate time to analyze and integrate the intent and guidance into their own mission analysis, commander's intent/guidance, and eventual COAs. The time taken to develop the commander's intent and guidance should not be so lengthy as to dislocate or paralyze the MDMP of the staff or subordinate units. The sooner a commander can express his intent and guidance to his staff, the sooner they can move ahead with intensive, focused, COA development. Commanders control battlefield tempo by making and executing decisions faster than the enemy does. Therefore, commanders must always strive to optimize time available. They must not allow estimates to become overly time-consuming. However, they must be comprehensive and continuous and must visualize the future.<sup>16</sup>

The commander's intent and guidance is "to the point with the matter at hand" when it avoids superficial musings, is direct, and is grounded in the reality and dynamics of the situation currently facing him. The commander must be sufficiently aware of the situation as close to reality as possible. He will have this awareness through his own intellect, experience, and intuition, or gain it through his own commander's estimate and staff estimates. The relevance of the commander's intent and guidance will be commensurate with his situational awareness.

The commander's intent is "useful and helpful" when it enables the staff and subordinates to understand what the force must do and the conditions the force must meet to succeed with respect

---

<sup>16</sup> Preceding four sentences: *FM 101-5, Staff Organization and Operations*, C-1.

to the enemy, terrain, and the desired end state. Likewise, his guidance is useful and helpful when it provides the staff with enough additional guidance to focus staff activities in planning the operation and focuses on the essential tasks supporting mission accomplishment.

From the working definitions, one can form evaluation criteria for the commander's intent and guidance. These evaluation criteria are used in chapter four to provide the analysis required to discuss the problems with the current mission analysis process:

1. Is the commander's intent and guidance timely: does the staff receive it before they begin intensive COA planning and does the subordinate headquarters have adequate time to analyze and integrate the intent and guidance into their own mission analysis, commander's intent/guidance, and eventual COAs.
2. Is the commander's intent and guidance relevant: does it avoid superficial musings, is direct, and is grounded in the reality and dynamics of the situation currently facing the unit.
3. Is the commander's intent constructive: does it enable the staff and subordinates to understand what the force must do and the conditions the force must meet to succeed with respect to the enemy, terrain, and the desired end state.
4. Is the commander's guidance constructive: does it provide enough additional guidance to focus staff activities in planning the operation and focus on the essential tasks supporting mission accomplishment.

Commanders are not getting what they need from their staff or the current process of executing mission analysis. There are problems with the doctrinal process that hinders commanders and their staffs in visualizing and describing an operation. The purpose of mission analysis is to assist the commander in understanding the friendly situation, enemy situation, the terrain, and the desired endstate in order to develop an overall intent for the operation and for the commander to issue guidance to focus staff activities in planning the operation. It is imperative that the commander and staff "get it right" concerning mission analysis. The ramifications of failure in this step of the MDMP will be magnified as the commander and staff continue through the decision making process. To continue the foundation of this paper from a theoretical and doctrinal basis, the next chapter discusses the U.S Army's current process to conduct mission analysis in order to determine the process design and describe how it assists the commander in development of intent and guidance.



## CHAPTER TWO

# Mission Analysis in the MDMP

## Theory and Doctrine

This chapter reviews the theoretical and doctrinal roots of mission analysis to determine what the process is designed to do and describe the U.S. Army's current doctrinal process to conduct mission analysis and assist the commander in developing his intent and guidance. After establishing a working definition and function for theory and doctrine, the chapter transitions to the relationship between theory, historical principles, and doctrine. From this relationship, one can see the importance of a doctrinal and analytical approach to problem solving. The remainder of the chapter discusses how the U.S. Army applies this approach to the mission analysis process, how doctrine describes the process, the roles and responsibilities of the commander and staff during the process, and the major pieces of key understanding the process produces to assist the commander with his battlefield visualization and in defining the tactical problem. This foundation of theory, doctrine, and details of the mission analysis process set the stage for further discussion in subsequent chapters.

In his paper, "How War Works: The Origins, Nature, and Purpose of Military Theory", Dr James Schneider lays out a solid definition for theory and military theory. He states:

Theory, in general, is a conceptual map by which we steer through the real world and deal with its various and sundry problems. Theory tells us not only how the world is, but also how the world works; in this sense, theory is also like a blueprint. As both map and blueprint, theory provides us with a broad analytical framework with which to solve problems critically as we actively engage reality. Thus, military theory is a critical, conceptual framework that provides us with practical solutions to real-world problems about armed conflict. Military theory, in essence, tells us what war is and how war works.<sup>17</sup>

Theories provide an explanation of phenomena (war for example), a conceptual, critical, reliable explanation. Military theory is a professionally justified system of beliefs about the phenomena

---

<sup>17</sup> Dr James J. Schneider, *How War Works: The Origins, Nature, and Purpose of Military Theory*, 1.

of war; the military institution's conceptual construct/framework for understanding and solving military problems.

Doctrine is the application of theory. It is how one intends to approach particular phenomena. It is how an institution interprets theory, which is why various national militaries have differing doctrine based on the same theories. One can view the nature of a military conflict as a particular phenomenon or reality that is difficult to understand or grasp in its entirety. Theory can assist with gaining a proper understanding of the conflict's reality, its nature, and how to prepare for it. Those who do not understand the nature of the phenomenon/reality (future conflict, how it evolves, where it is heading) will not be properly prepared to shape/resolve it in their favor. Once one defines a phenomenon through theory, one can develop doctrine to help succeed within it. However, doctrine based on flawed theory may not always be adequate to succeed when dealing with the brunt of reality.<sup>18</sup> Which nation's military has the right doctrine depends on how well they have understood the particular theory and how much they have advanced the theory to form a truer picture of reality.

An advantage of having a doctrinal approach to a process within any organization is that it facilitates unity of effort among separate elements in solving problems or executing tasks. Standing doctrinal processes, understood, accepted, and practiced, facilitate the rapid movement of individuals or teams within an organization with relatively little disruption or decrease in efficiency during training and execution of that particular process. Organizations, whose subordinate elements use tailored, non-doctrinal processes will perhaps find increased efficiency within the subordinate element at the expense of compatibility, flexibility, and unity of effort within the organization as a whole. Similar to a doctrinal approach, an analytical approach to

---

<sup>18</sup> Norman Maclean's book, *Young Men and Fire*, presents an excellent example of this statement. The August 1949 death of twelve Smokejumpers fighting a fire in Montana, illustrates the tragedy of when existing doctrine is not suited to handle the reality of the situation. The Smokejumpers had adequate doctrine to tackle the current theories on fire and fire management. However, the theories were flawed and their doctrine failed them in the ultimate test.

decision making also carries great advantages to large and diverse organizations that deal with equally large and complex problems.

In 1942, the U.S. Naval War College published a paper entitled, *Sound Military Decision*. Written in 1936, by an Army Major attending the Naval War College, the work included the essential features of the Estimate of the Situation. It is a tremendous study on the analytical and theoretical underpinnings of the modern MDMP and assists in understanding the basis of current U.S. doctrine. Within the first few pages of the paper, the author lays out the utility of an analytical approach to problem solving:

The science of war necessarily includes knowledge gained in other fields. In war, as in medicine or any other practical activity, the more inclusive and dependable the body of knowledge available as a basis for action, the more probable it is that the application of his knowledge, the art, will be effective. Realization of these facts has led to renewed emphasis on the scientific approach to the solution of military problems. The fallacy of staking the future upon the possible availability of a military genius in time of need became clear when it was appreciated that more than one nation, hitherto victorious in arms, had been defeated and humiliated when genius no longer led its forces. There followed in the military profession a conviction that, although extraordinary inherent capacity can be recognized and utilized when known to exist, it is safer and wiser to develop by training the highest average of ability in leadership than to trust to untrained "common sense" or to the possible advent of a genius.<sup>19</sup>

Arguably, one can say that the MDMP was designed for an adequate officer, on an adequate staff, to assist an adequate commander, to develop an adequate plan. Adequate, in this sense does not mean low quality; it simply means it is capable to accomplish what it is intended. In *Sound Military Decision*, the author continues the logic for an analytical approach to problem solving:

History has abundantly proved the folly of attempting, on any other basis, to cope with the unpredictable occurrence of genius in the hostile leadership. With the actual exercise of leadership in wars restricted to the reality of war, here is emphasized the need of peacetime training; training of subordinates in efficient performance, and more important, training of those who will be placed by the State in positions of responsibility and command. The proper solution of military problems requires the reaching of sound decision as to what is to be done. Upon the soundness of the decision depends, in great part, the effectiveness of the resulting action. Both are dependant on the possession of a high order of professional judgment, fortified by knowledge and founded on experience. Theoretical knowledge supplements experience, and is the best substitute in its absence. Judgment, the ability to understand the correct relationship between cause and effect, and to apply that knowledge under varying circumstances, is essential to good leadership. Professional judgment is inherently

---

<sup>19</sup> *Sound Military Decision*, 2.

strengthened by mental exercise in the amplification of logical processes to the solution of military problems.<sup>20</sup>

An analytical approach is inherently more applicable to structured teaching and foundational understanding for professionals learning their craft. Educating leaders in theory, history, and doctrine offers a baseline to the science of planning and later acts as the foundation to the art of planning as the leader grows in experience and judgment. The U.S. Army recognized the significant advantages a doctrinal and analytical approach brings to an organization, and created its own doctrine on decision making to gain these advantages.

### **U.S. Army Doctrinal Approach**

FM 3-0 states U.S. Army doctrine is the concise expression of how U.S. Army forces contribute to unified action in campaigns, major operations, battles, and engagements.<sup>21</sup> U.S. Army doctrine is authoritative but not prescriptive. It facilitates communications among soldiers no matter where they serve, contributes to a shared professional culture, and serves as the basis for curricula in the U.S. Army Education System. U.S. Army doctrine provides a common language and a common understanding of how U.S. Army forces conduct operations. It is rooted in time-tested principles but is forward-looking and adaptable to changing technologies, threats, and missions. U.S. Army doctrine is detailed enough to guide operations, yet flexible enough to allow commanders to exercise initiative when dealing with specific tactical and operational situations. To be useful, soldiers of all ranks must know and understand their doctrine.<sup>22</sup> Understanding U.S. Army doctrine will assist soldiers gain greater insight into the reality of their situation and how they fit into the larger ongoing operation.

Each mission a commander receives exists in a unique situational reality. In addition to viewing the situational reality through their own lens of personal experiences, biases, and

---

<sup>20</sup> *Sound Military Decision*, 3.

<sup>21</sup> *FM 3-0, Operations*, 1-14.

<sup>22</sup> Preceding paragraph: *FM 3-0, Operations*, 1-14.

paradigms, commanders use existing theory to help them gain insight on aspects of the situation they currently can not see or confirm. Using theory to help them interpret reality, they will apply historical principles, tenets, or perhaps unique solutions that will assist them in confronting the situation. If the principles/tenets consistently assist in resolving similar situations successfully, they will more than likely become accepted doctrine and useful tactics, techniques, and procedures (TTP).

TTP provide the tactician with a set of tools to use in developing the solution to a tactical problem. Tactics is the employment of units in combat. Techniques are the general and detailed methods used by troops and commanders to perform assigned missions and functions, specifically the methods of using equipment and personnel. Procedures are standard and detailed courses of action that describe how to perform tasks. Tactics always require judgment and adaptation to the unique circumstances of a specific situation. Techniques and procedures are established patterns that can be applied repeatedly with little or no judgment in a variety of circumstances.<sup>23</sup>

Newly developed and accepted doctrine/TTP will in turn shape future situational reality and the cycle will continue to evolve new theory, principles, tenets, and doctrine. Commanders must proliferate this newfound knowledge throughout an organization by organizing it into coherent doctrine, teaching the doctrine within the military educational system, and then practicing the doctrine within their organizations. Since existing U.S. Army doctrine is rooted in time-tested principles, it becomes evident that there is great importance on defining the situation as close to reality as possible so that the appropriate doctrine/TTP can be applied properly.

The mission analysis is the staff's most significant opportunity to help the commander place the situation into proper context and come as close as possible to understanding the reality that is currently confronting them. The context of a situation, or the circumstances in which an event occurs, is the comparison of known or perceived enemy and friendly objectives, capabilities, and

---

<sup>23</sup> Preceding paragraph: *FM 3-90: Tactics*, 1-2.

options available to the commander expressed in terms of purpose, time, space, and resources. Proper use of the mission analysis process should enable a staff to gather pertinent information, analyze the information, gain insight on the problem and situation, and then arrange those insights to improve the contextual understanding of the problem/situation for the commander and the staff.

## Application of the Mission Analysis Doctrine

The U.S. Army's doctrinal source for mission analysis is FM 101-5 (Staff Organization and Operations). The preface of FM 101-5 states it is intended for use by staff officers in carrying out their duties and responsibilities as they assist the commander in accomplishing the mission. The commander, as well as the staff, must be the master of this manual. This section outlines the U.S. Army's doctrinal process for mission analysis, the roles and responsibilities of the commander and staff officers, and their interaction during the process.

Figure 2-1 depicts where the mission analysis fits into the seven steps of the MDMP. It also displays the four items within mission analysis that are specifically the

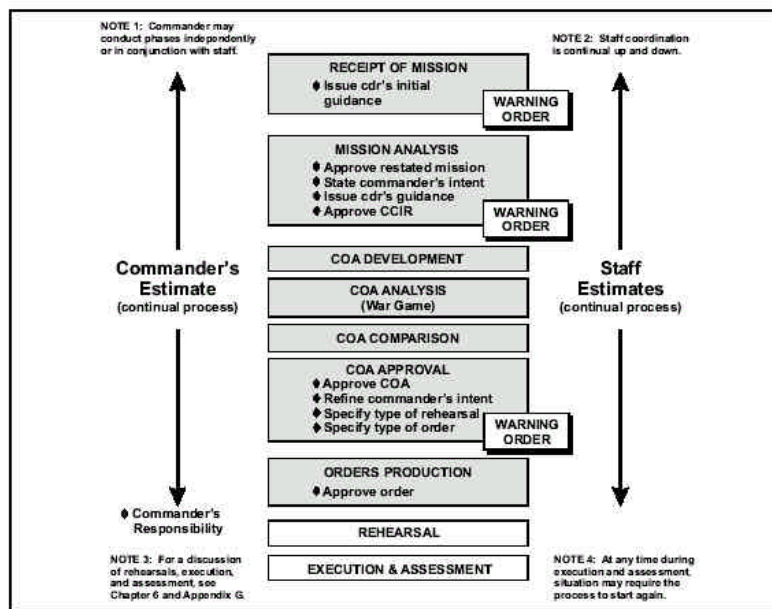


Figure 2-1. The military decision-making process

commander's responsibility: approve restated mission, state commander's intent, issue commander's guidance, and approve commander's critical information requirements (CCIR).

The commander is in charge of the MDMP and decides what procedures to use in each situation. The planning process hinges on a clear articulation of his battlefield visualization. He is personally responsible for planning, preparing for, and executing operations. The Executive Officer (XO) manages, coordinates, and disciplines the staff's work and provides quality control. He must understand the commander's guidance because, as the XO, he supervises the entire process. By issuing guidance and participating in formal and informal briefings, the commander and XO guide the staff through the decision-making process.<sup>24</sup> The mission analysis process also calls for the commander to conduct his own mission analysis in addition to the staff's mission analysis, so that he has a frame of reference to assess the staff's work.<sup>25</sup>

U.S. Army doctrine does not dictate how a commander and staff must interact during mission analysis. Commanders are free to interact with their staff in any manner that suits their leadership style and problem solving approach. Depending on the circumstances and time available, commanders will impose themselves on the process as much, or as little, as they feel is warranted. Regardless of how involved the commander is in the process, all staff organizations and procedures exist to make the organization, analysis, and presentation of vast amounts of information manageable for the commander. The commander relies on his staff to get from battlefield "information" to battlefield "understanding" or situational understanding, quicker than his adversary.<sup>26</sup> This situational understanding is not only the product of the commander's

---

<sup>24</sup> Preceding paragraph: *FM 101-5, Staff Organization and Operations*, 5-1 and 5-2.

<sup>25</sup> *FM 101-5, Staff Organization and Operations*, 5-5. The commander conducts his mission analysis as part of his commander's estimate. Appendix C-2 of *FM 101-5* states the commander's estimate is an analysis of all the factors that could affect a mission. The commander integrates his personal knowledge of the situation, his analysis of METT-TC factors, the assessment of his subordinate commanders, and any relevant details he gains from his staff. The commander's estimate deals more with assessing the intangibles of training, leadership, and morale, and it results in a decision. The appendix also states that the commander uses his personal estimate as a cross-check of his staff's estimates.

<sup>26</sup> Preceding two sentences: *FM 101-5, Staff Organization and Operations*, 1-3.

estimate and the various staff estimates, but also the skillful synthesis of these products into greater contextual understanding.

### **The Eleven Key “Understandings” of Mission Analysis**

The seventeen steps of mission analysis carry the commander and staff through various levels of information gathering and analysis. Along with the specific commander’s outputs of intent, guidance, and approval of the restated mission, these steps are intended to produce various products related to the individual battlefield operating systems which will assist the commander begin his battlefield visualization and define the tactical problem. The staff must wade through tremendous amounts of information and discern what is significant to the operation.

During mission analysis, the staff gathers eleven pieces of key “understanding” for the commander. The staff derives this understanding from the first eleven steps of the mission analysis. By completing these steps, the staff gains awareness about the higher headquarters’ order; the enemy and terrain; specified and implied tasks; available assets to achieve the mission; constraints imposed by higher headquarters or the situation; critical facts and assumptions; potential risks/hazards; information requirements; initial reconnaissance requirements; a tentative timeline; and a restated mission which includes the essentials tasks assigned.<sup>27</sup> The staff must translate this awareness into understanding. The level of understanding gained by the staff is dependant on their skill, collective intellect, and experience. These first eleven steps are intended to help place the commander’s mission into context with the friendly situation, the enemy situation, and the terrain.

Apart from reading the higher headquarters warning orders (WARNO), fragmentary orders (FRAGO), and operations order (OPORD), U.S. Army doctrine does not dictate the method of how the commander and staff will gather and process required information during mission analysis. There are suggestions as to which staff members should focus on which steps, but the

---

<sup>27</sup> FM 101-5, *Staff Organization and Operations*, 5-5 to 5-8.



commander and staff may use any technique that suits their desires and preferences. As far as presenting the understanding gained from the analysis, doctrine simply states the staff will brief the commander on their findings, time permitting, in the form of a mission analysis brief. The suggested briefing outline (see figure 2-2) in FM 101-5 is intended to cover the essential elements gathered from the first eleven steps.

- Mission and commander's intent of the Headquarters two levels up
- Mission, commander's intent, concept of the operation, and deception plan or objective of the headquarters one level up
- Review of commander's initial guidance
- Initial IPB products
- Specified, implied, and essential tasks
- Constraints on the operation
- Forces available
- Hazards and their risks
- Recommended initial CCIR
- Recommended time lines
- Recommended restated mission

**Figure 2-2. Mission analysis brief format**

The mission analysis brief is a formal or informal presentation of the staff's analysis and estimates created during the earlier steps in mission analysis. It is also a time to refocus and bring the staff together to hear the findings of the other staff members and the inputs of the commander. If done correctly, the mission analysis brief should present the relevant conclusions reached by the staff as a result of their efforts during the mission analysis. The relevant conclusions should help the commander and staff develop a shared vision of the requirements for the upcoming operation.<sup>28</sup> Doctrine states during the mission analysis, the commander develops his initial intent and guidance for the operation. After reviewing the mission analysis briefing and the restated mission, he modifies his intent statement and guidance if necessary.<sup>29</sup> This statement

---

<sup>28</sup> FM 101-5, *Staff Organization and Operations*, 5-9.

<sup>29</sup> FM 101-5, *Staff Organization and Operations*, 5-9.

assumes that the relevant conclusions derived by the staff during their mission analysis offer a view not considered by the commander or have shed new light on an aspect of the operation that enhances the commander's understanding to the point where he feels he must change his intent and guidance to better reflect this new situational understanding.

From theory, to doctrine, to application, this chapter reviewed the theoretical and doctrinal roots of mission analysis, discussed what the process is designed to do, and described the U.S. Army's current doctrinal process to conduct mission analysis and assist the commander in developing his intent and guidance. This chapter also established the premise that an analytical and doctrinal approach to mission analysis is sound, facilitates unity of effort among separate elements, and is inherently more applicable to structured teaching and foundational understanding for professionals learning their craft. The mission analysis is the staff's most significant opportunity to help the commander place the situation into proper context and come as close as possible to understanding the current reality. By discerning the key understandings from the mission analysis process, the staff assists the commander begin his battlefield visualization and in defining the tactical problem. This foundation of theory, doctrine, and details of the mission analysis process sets the stage for further discussion on the negative trends observed during the execution of the mission analysis process.

## CHAPTER THREE

# Mission Analysis in the Field

## Basic Trends in Mission Analysis

Having defined the terms of the discussion on mission analysis, explained the evaluation criteria, and discussed the theoretical and doctrinal foundations for mission analysis, chapter three examines commander and staff trends in mission analysis during training and real world operational environments. This chapter will answer the question of “how are units executing mission analysis and developing the commander’s intent/guidance during field training and real world operations?” It looks at the trends occurring at the Combat Training Centers (CTCs) and from personal observations of former commanders (all with real world operational experience) ranging in ranks from lieutenant Colonel to four-star General. While the evidence from the CTCs describes trends occurring during high-intensity training environments, the interviews of former commanders captures the similarity of those trends in real world operational environments. The trends are generally consistent regardless of the various methods of mission receipt, environmental factors, or time constraints.

The basic trend observed with battalion and brigade staffs conducting mission analysis in training environments is that many of the staff officers lack a fundamental understanding of what they are trying to accomplish with the process and they do not have sufficient relevant experience to provide context to their staff estimates.<sup>30</sup> This lack of understanding and experience leads to inadequate analysis of information that culminates with irrelevant conclusions presented to

---

<sup>30</sup> Personal interviews: Burba, Cavazos, and Lindsay. The majority of the General Officers interviewed commented on the lack of relevant experience junior staff officers have in relation to their positions. Staff officers need more time in troop assignments to learn their trade and develop intuition directly relevant to warfighting. GEN (R) Burba- “Officers don’t have enough time in the trenches with line units. We are pulling officers out of the field units too soon. They are not getting to learn their trade.” GEN (R) Cavazos- “Staff at those levels (BDE and BN) are not experienced and mature enough to exploit the knowledge on how you (a commander) think. There are exceptions, and the commander needs to watch for those talented staff officers.” GEN (R) Lindsay- “BQ captains and majors don’t get to learn their trade. We can teach science, but you must develop art in the trenches with line units.”

the commander.<sup>31</sup> Note that experience is not merely defined as the total years in service, but as relevant experience in relation to mission analysis, field training exercises, and/or real world operations. Soldiers with appropriate experiences recognize the significance of certain specified tasks or can quickly deduce implied tasks. Intuitively, they see, and can express, the relevant conclusions from their analysis of the situation that will be important to the commander. Without an experienced or intuitive staff, the commander's intent and guidance does not benefit from a thorough analysis of the situation and far too often lacks clarity and focus.<sup>32</sup> The result is that the staff is unfocused during the planning process and does not have a proper understanding of how the commander visualizes the upcoming battle.<sup>33</sup> This is not to say that the mission will be an automatic failure, but that the commander and staff are not benefiting from the full potential of the theoretical construct and doctrinal process of mission analysis.

This trend is not much different in real world operations, however, the dynamic of the trend changes as units remain in theater and continue operations. As the commander and staff become more familiar with the enemy, terrain, and friendly forces (theirs as well as sister or coalition forces), and gain experience within their job, their ability to recognize relevant issues and speed up the process during mission analysis raises considerably.<sup>34</sup> Staff officers become more

---

<sup>31</sup> CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98: Statistics from NTC show that prior to units attending the predeployment Leader Training Program (LTP), active component (AC) brigade staff members have only approximately three to five months in position. During unit in-briefs, staffs report that their Home Station training had not focused on "staff planning procedures" and most arrive without a working or validated planning SOP (PSOP) or tactical SOP (TACSOP). Planning at the staff level is slow and inefficient due to individual staff inexperience. The commanders' staffs have not yet had the time or opportunity to define their roles, responsibilities, and procedures in the MDMP. The XO's and staff's first MDMP attempts result in a trial and error approach. The staff consumes time in refining staff procedural issues and not the tactical issues.

<sup>32</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY99; BCTP Perceptions 1999, 2000, and 2001: Brigades; BCTP Perceptions 2000 and 2001: Divisions and Corps.

<sup>33</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY99; BCTP Perceptions 1999, 2000, and 2001: Brigades; BCTP Perceptions 2000 and 2001: Divisions and Corps.

<sup>34</sup> Personal interviews: Cavazos, Crouch, Greczyn, Greer, and Miller: GEN (R) Cavazos- "The first mission analysis will be the long one, subsequent ones will become quicker due to the familiarity of the information." GEN (R) Crouch- "Operational events that are long term and on-going (i.e. Bosnia/Kosovo) tend to streamline the mission analysis due to so much prior knowledge of current events and unit status." COL Greczyn- "In operations/wartime, commanders have a greater sense of unit status and implications. The mission analysis tends to streamline itself as staff officers brief by exception due to so much prevailing knowledge on the situation. Predeployment mission analysis is much more in-depth due to the

comfortable with their roles and responsibilities within the planning process and they gain relevant experience in the job they are performing. As each day passes and they accomplish subsequent missions, the staff gains greater context with the reality of the situation. They also gain greater insight as to how their commander thinks and operates while in the midst of an on-going operation. The commander and staff gain this understanding by working together daily, planning continuous operations, and executing those operations in a real world environment.<sup>35</sup>

### **Receipt of Mission**

A survey of history reveals that there is no consistent trend on how commanders have received their missions during field training or real world operations. The form or method of receipt, levels of informational detail, warning of the mission and environmental conditions vary drastically. The trends observed during the execution of mission analysis are generally consistent regardless of the various methods of mission receipt, conditions, and environmental factors.

Commanders receive missions in training or real-world environments in various forms: operation plans (OPLAN), contingency plans (CONPLAN), warning orders (WARNO), operations orders (OPORD), and fragmentary orders (FRAGO). They can also discern pending missions simply by their level of awareness to on-going events. The method in which they receive missions varies with every situation.

Commanders received missions with varying levels of informational detail. Depending on the method in which they receive their mission and the situation confronting them, commanders

---

unfamiliarity of the situation.” COL Greer- “With ongoing operations, the mission analysis brief became a simple update brief that focused on changes to information and new impacts of that information; much less formal and more focused.” COL Miller- “During operations, the running estimate became the key focus, targeting meetings, etc.”

<sup>35</sup> Personal interviews: Burba, Cavazos, Franks, and Grange: GEN (R) Burba- “Staffs don’t know their commander and his blind spots, therefore the mission analysis brief is longer than it needs to be. They are not focused on how he receives information.” GEN (R) Cavazos- “...important to let staff understand how you think.” GEN (R) Franks- “Staffs don’t know their commander, how he thinks, what he needs in order to think.” LTG (R) Grange- “Units are missing the conclusions of the sidebar conversations of the commander. They need to have a scribe or somebody to capture the evolving thought process of the commander as he talks to subordinates and superiors.”

may receive very unclear or very detailed instructions as to what is required of them. Units may gain access to tremendous amounts of information before a rotation to any of the nation's CTCs or a deployment to an on-going real-world operation in a foreign country. On the other hand, they may receive a mission that requires action in the midst of a developing and unstable situation. Either way, commanders must be prepared to execute mission analysis within varying levels of information uncertainty.

Likewise, the amount of time between mission receipt and mission execution is seldom consistent. Commanders may have weeks or days notification of an upcoming mission or they may have an OPORD thrust into their hands one day of a BCTP rotation or receive a FRAGO in the middle of a battle which requires them to develop a new plan hours before execution. Regardless of the timing, units receive missions in peacetime or wartime with varying lengths and levels of preparation and information build up. Preparation time before pending missions can vary from years (OPLANs and CONPLANs) to minutes (FRAGOs).

Working environments are seldom consistent during execution of operations. The environment units are in can vary from a harsh war zone to a comfortable Tactical Operations Center (TOC) or classroom setting with numerous computers and electronic assistance devices readily available.

Establishing the premise that commanders and staffs execute mission analysis under various forms of mission receipt, levels of informational detail, warning of the mission and environmental conditions, it is important to examine the specific trends that exist in regard to how commanders and staffs are executing mission analysis and developing commander's intent and guidance in dynamic training and wartime environments.

### **Specific Trends in Mission Analysis**

This paper makes two distinctions when analyzing trends: those observed and recorded during peacetime field training and those experienced and recalled during real world operations

(published documents and commander interviews). Much information exists on specific commander and staff training trends due to observation and analysis by Observer/Controllers (O/Cs) at the U.S. Army training centers.<sup>36</sup> Units in real world operations do not often have the luxury of O/Cs traveling with them, observing and recording the various issues, and presenting their analysis later to the commander and his staff. The U.S. Army relies on unit records, unit memorandums, published memoirs, and personal interviews to capture what happened during the operation, identify negative trends, and help determine corrective action. This paper relied heavily on personal interviews to grasp the essence of the commander and staff trends during mission analysis that exist in real world operations.

The specific trend observed with how staffs gather information during mission analysis is that most staffs have no problem dissecting an order and finding the required elements for mission analysis. What they do have a problem with is analyzing the elements they have dissected and extracting relevant information for the commander.<sup>37</sup> Although there are numerous techniques on how to divide the workload of mission analysis, most staffs will digest the order, find the elements required by the MDMP, and then gather this information for presentation to the commander. Most staffs do not analyze the gathered information to discern its implications or what is relevant to the commander. O/C observations state most staffs possess only a partial understanding of the mission analysis process and, as a result, “list” information (with little analysis) given from the higher headquarters.<sup>38</sup> What results are lists of information (specified

---

<sup>36</sup> During training at the CTCs, O/Cs record observations and After Action Review (AAR) information for every mission. The training centers send their analysis of the various trends to the Center for Army Lessons Learned (CALL). Quarterly, CALL publishes these trends in the form of bulletins.

<sup>37</sup> Personal interviews: Burba, Franks, Greczyn, Greer, and Lindsay: GEN (R) Burba- “Key information gets camouflaged with the minutia, they (the staff) don’t get to the key aspects. Inexperienced staffs tend to give facts, not relevant information. Make your lists of stuff, but do the analysis of what is relevant and what will be briefed. Staffs sometimes overwhelm the commander with stuff he doesn’t need.” GEN (R) Franks- “Too often, staffs are not giving information to the commander that helps him gain an edge on the enemy.” COL Greczyn- “Far too often, the staff just presents facts, not analysis.” COL Greer- “Far too many staffs are focusing on the process and not the importance of the information.” GEN (R) Lindsay- “Far too often, the mission analysis brief does not get to the ‘so what’; its more form and not enough substance.”

<sup>38</sup> CTC Trends for JRTC: 2<sup>nd</sup> and 3<sup>rd</sup> Quarters FY00; CTC Trends for JRTC: 2<sup>nd</sup> and 3<sup>rd</sup> Quarters FY99.

and implied tasks, forces available, adjacent unit missions) rather than an analysis of the information that leads to further defined tasks or implications. For example, a staff member will quickly identify and list on a chart the number of rounds available or the controlled supply rate (CSR) for a weapon system. The staff fails to analyze the impact of those facts on the mission and seldom gives a second thought to the matter until too late in the planning process.<sup>39</sup> This lack of analysis is due in part to a lack of understanding of what the mission analysis is designed to do for the commander and due to a lack of experience to rapidly see the ramifications and implications of the information they have gathered. Lack of time is another factor that usually drives inexperienced staff members to default from analysis to filling out the MDMP checklist.

During execution of the mission analysis in a field-training environment, another trend observed is the staff rarely conducts mission analysis as an integrated battle staff function.<sup>40</sup> The XO seldom takes the time to integrate the entire battle staff in conducting the mission analysis or brief them on the mission analysis before the initial brief to the commander. This failure results in staff members conducting mission analysis blindly, without any context to focus their staff estimates.<sup>41</sup> The battle staff (or their representatives) rarely meets at a central location, receives any brief of the upcoming operation, or conducts a mission analysis of their proponent battlefield operating system (BOS) synchronized with the other elements. It is usually an estimate conducted separately and not put into context with the other staff elements, resulting in repeating work conducted by other staff sections or wasted time focusing on issues not germane to mission analysis. Frequently, the air defense officer, logisticians, and other attached staff officers are not informed when the main command post receives an order; they are not aware that the mission

---

<sup>39</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY98; CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98.

<sup>40</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY98; CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98; CTC Trends for NTC: 1<sup>st</sup> and 2<sup>nd</sup> Quarters FY97; CTC Trends for NTC: 1<sup>st</sup> and 2<sup>nd</sup> Quarters FY96; CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY95.

<sup>41</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY96.



analysis is about to be conducted.<sup>42</sup> Many of the battle staff are junior officers with little relative experience. They can spend lengthy periods unfocused and researching unimportant information that renders their estimate irrelevant to the commander and the rest of the staff.

The trend observed with how staffs present information to the commander during the mission analysis brief is closely related to how staffs gather the information. Most staffs present the listed elements as outlined in the mission analysis within the MDMP, but they tend to brief facts, not analysis, resulting in the commander being forced to think for the staff.<sup>43</sup> This lack of analysis boils down to a lack of experience of staff members. This can be attributed to: limited training of staff officers or NCOs, staff members not knowing what is expected of them, or staff members not knowing what to expect from other staff members.<sup>44</sup> A lack of specific guidance/standards from the XO and S3 is also a significant problem.<sup>45</sup> If the key leaders do not intimately understand the MDMP, they will not be able to coach, teach, and mentor their staff. Junior staff members need someone to carefully guide their staff work, show them how to develop and present a product correctly, teach them how to ask the right questions, then demand detailed analysis. Although presentation technique varies (computer projection, butcher board paper, preformatted placards), the trend remains; most staffs do not provide relevant information to the commander during the mission analysis brief.

When a staff does little more than gather lists of information for a commander, they have not assisted him in framing the problem or gaining further context of the situation beyond what he was able to discern for himself. Because of a poor analysis by the staff, the commander gets very little assistance in “getting beyond himself” and achieving any greater vision of the requirements for the upcoming operation. The mission analysis brief ends up just confirming or denying what

---

<sup>42</sup> CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY98; CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98; CTC Trends for NTC: 1<sup>st</sup> and 2<sup>nd</sup> Quarters FY97; CTC Trends for NTC: 1<sup>st</sup> and 2<sup>nd</sup> Quarters FY96; CTC Trends for NTC: 3<sup>rd</sup> and 4<sup>th</sup> Quarters FY95.

<sup>43</sup> CTC Trends for JRTC: 4<sup>th</sup> Quarter FY99 and 1<sup>st</sup> Quarter FY00.

<sup>44</sup> CTC Trends for JRTC: 4<sup>th</sup> Quarter FY99 and 1<sup>st</sup> Quarter FY00.

<sup>45</sup> CTC Trends for JRTC: 4<sup>th</sup> Quarter FY99 and 1<sup>st</sup> Quarter FY00.

he already knew. The commander is left on his own to develop intent and guidance as the staff has not added much context to his own understanding of the situation or helped shape the problem for his further guidance.

There is not much difference in the way commanders and staffs conduct mission analysis and develop intent and guidance in real world operations as opposed to field training.<sup>46</sup> Most officers with real world operational experience express that the first mission analysis before a deployment is fairly formal and lengthy but then the process tends to streamline itself during continued operations. As the staff gains greater context with their situation, they can intuitively answer several of the steps of the mission analysis. They state that it tends to be less formal and less time consuming as the unit develops context and experience relevant to their situation. However, until staffs gain the context and experience required to enable them to streamline the process intuitively, the commander must train and prepare them to operate in a time-constrained environment using the mission analysis process to it fullest capacity to assist him.

Far too many staffs are not prepared to execute the MDMP in a time-constrained environment.<sup>47</sup> Many staff members understand the basics of the process, but due to a fundamental lack of understanding of its design and details, they cannot execute the process quickly. The staff attempts to force their way toward a performance standard that they are unable to achieve. The frustration of identifying training weaknesses in the planning process in the midst of the training event does little to aid the staff in becoming more proficient with the MDMP in a

---

<sup>46</sup> Personal interviews: Barth, Crouch, Grange, Leyden, and Lindsay: Most of the officers interviewed saw very little difference in the manner in which mission analysis was conducted during training and real world operations. LTC Barth- "Due to types of missions we conducted (Multinational Force and Observers-Sinai), I saw no real difference in the manner we conducted mission analysis during training and operations." GEN (R) Crouch- "Time is the big difference, but the process was the same. Learn the process, grounded in doctrine, and then streamline it in (time-constrained) execution." LTG (R) Grange- "Peacetime versus wartime mission analysis? I saw very little difference, maybe more formal in peacetime training events." COL Leyden- "The processes are very similar due to the type of organization we were and the missions we normally carried out (Aerial Exploitation Battalion). Some unit types will have a greater chance to practice real world mission analysis all the time because they operate that way day to day." GEN (R) Lindsay- "Same process... time constraint is the biggest issue."

<sup>47</sup> CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98.

time-constrained environment. When a staff has difficulty performing the MDMP, attempting to conduct it rapidly often leaves the unit with a plan that lacks both detail and synchronization.<sup>48</sup>

This chapter established the basic trends observed with battalion and brigade staffs conducting mission analysis in training and real world environments. Many of the staff officers lack a fundamental understanding of what they are trying to accomplish with the process and they do not have sufficient relevant experience to provide context to their staff estimates. This leads to inadequate analysis of information that culminates with irrelevant conclusions presented to the commander. These trends are generally consistent regardless of the form or method of receipt, levels of informational detail, warning of the mission and environmental conditions. The subsequent chapter will analyze these trends to determine the problems and impacts associated with mission analysis and commander's intent/guidance development.

---

<sup>48</sup> CTC Trends for NTC Compendium: 3<sup>rd</sup> Quarter FY97 through 2<sup>nd</sup> Quarter FY98. Also, personal interviews: Burba, Crouch, Fontenot, Greer, and Lindsay: GEN (R) Burba- "Units are chopping pieces out of the process to save time, instead of doing the steps faster. This takes experience." GEN (R) Crouch- "Commanders and staffs that do not understand the process tend to truncate it instead of streamlining it (chop pieces out instead of doing all pieces faster) which usually leads to missing something very important but not as obvious." COL (R) Fontenot- "We (as an army) just do not know our doctrine, FM 101-5. People keep trying to circumvent the principles of the process. You can always streamline the steps, but not skip them." COL Greer- "The staffs' ability to conduct streamlined MDMP will grow with experience, but this must be trained and mentored by commanders." GEN (R) Lindsay- "Most staffs don't really know the MDMP well enough to use it properly. This takes training and experience."

## CHAPTER FOUR

### **Problems with the Current Mission Analysis**

#### **Failure to Meet Evaluation Criteria**

This chapter examines the evidence from the mission analysis trends in relation to the evaluation criteria to discuss the problems and impacts associated with mission analysis and commander's intent/guidance development. It answers the question of "what are the problems with the current process of mission analysis and development of the commander's intent and guidance?" By examining the trends, discussed in chapter three, in relation to the commander's intent/guidance evaluation criteria, outlined in chapter one, the evidence shows that the current mission analysis process is failing the evaluation criteria in several areas. These failures reveal fundamental problems with the execution of the U.S. Army's current mission analysis process. This chapter discusses these problems and the impacts associated if no action is taken to mitigate them.

An analysis of the trends occurring during the execution of mission analysis reveals that the commander's intent and guidance are not meeting the evaluation criteria established to determine their effectiveness. This section discusses each criterion in relation to the associated successes/failings observed in order to begin the discussion on the problems with the current mission analysis process.

**Evaluation Criterion 1:** Is the commander's intent and guidance timely. Most commanders are developing intent and guidance in a timely manner. There is no evidence that supports a wide spread trend of untimely intent and guidance by commanders during execution of the mission analysis process. It appears that most staffs receive the commander's intent and guidance before they begin intensive COA planning and subordinate headquarters have adequate time to analyze and integrate the intent and guidance into their own mission analysis.

**Evaluation Criterion 2:** Is the commander's intent and guidance relevant. Due to inadequate analysis, the commander does not benefit from the staff's collective intellect and his intent and guidance may not be grounded in the reality and dynamics of the situation. Although each commander may vary in their ability to write well-worded intent and guidance statements, the most significant aspect of this criterion, that is an apparent shortfall, is the concept of it being grounded in the reality and dynamics of the situation currently facing the unit. The nature of warfighting is far too complex for one man to grasp everything in context and to see the problem framed and defined. This is one of the reasons commanders have a staff, in order to collectively integrate information with sound doctrine and technical competence to assist him in his decisions.<sup>49</sup>

**Evaluation Criterion 3:** Is the commander's intent constructive. As shown in chapter three, far too often, commanders do not express their intent in a clear and concise statement. This leads to confusion with the staff and subordinates in understanding what the force must do and the conditions needed to succeed in relation to other friendly forces, the enemy, the terrain, and the desired endstate.

**Evaluation Criterion 4:** Is the commander's guidance constructive. By not expressing their guidance in a clear and concise statement, commanders often do not provide enough additional guidance to focus staff activities in planning the operation and focus on the essential tasks supporting mission accomplishment. This confusion also leads to an unfocused staff while planning the activities of the operation.

## **Problems with Mission Analysis**

An analysis of the failings of the evaluation criteria reveals that there are three fundamental problems with the execution of mission analysis in giving commanders the information they need to develop timely, relevant, and constructive commander's intent and guidance. In its current

---

<sup>49</sup> *FM 101-5, Staff Organization and Operations*, 5-2.

form, the mission analysis process fails to address three fundamental problems that commanders and staffs struggle with during the execution of mission analysis. First, it does not take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs to present the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance.

The lack of relevant experience will remain a problem unless the U.S. Army can figure out a way to give officers more relevant troop assignments for longer lengths of time. Unless the U.S. Army can solve the problem of allowing future commanders and staff officers a means to gain more experience in jobs that are at the tactical level, conducting the actual operations that they will be leading or planning themselves in the future, it will be difficult for future commanders and staff officers to inculcate that experience second hand.<sup>50</sup> Solving this problem is not within the scope of this paper, but mitigating the effects of inexperience is dealt with in chapter five.

Why is there a lack of fundamental understanding as to what the mission analysis is designed to accomplish? A review of chapters one and two of this paper show that the theoretical construct of mission analysis is sound. The doctrine is adequately adapted to fit the findings of theory. However, what is it missing? Why do so many commanders and staffs work their way through the doctrinal steps of mission analysis and yet not accomplish what the process intended: help place the commander's mission into context with the friendly situation, the enemy situation, and the terrain and help the commander and staff develop a shared vision of the requirements for the

---

<sup>50</sup> Personal interviews: Burba: GEN (R) Burba stated, since the 70s, we have been pulling officers out of the field units too soon. They are not getting to learn the business of warfighting. Changing the education program would not fix the real issue. Short of fixing the personnel problem, we would not be fixing the real problem with inexperience.

upcoming operation. Too many staffs fail to significantly contribute to the development of the commander's intent and guidance with the presentation of their analysis for two reasons. First, because they fail to recognize how each step of the mission analysis process provides key elements of understanding and needs the analysis of each BOS within the staff. Second, staffs fail to realize that they cannot simply skip various steps due to a lack of time or due to the absence of various BOS representatives. The staff must work through each step and the findings placed in context to the situation. Far too often, either staffs are skipping steps of the process due to time constraints, or they are executing all of the steps of the mission analysis but not as a unified team. Each step in the process has important meaning to the greater whole of the endstate. Simply removing a step, to speed up the process, leaves out a significant piece of context that the commander requires to adequately frame the problem and, subsequently, complete his intent and guidance.<sup>51</sup> Failing to integrate all of the battlefield operating systems into the mission analysis denies the presence of various levels of expertise to analyze the information. This denies valuable context that the commander needs in order to help him frame the problem.

The mission analysis construct is good, but not complete. The current doctrine for mission analysis is incomplete in four areas: it fails to fully convey understanding to staffs as to what mission analysis is designed to do; it does not adequately explain how to frame a problem for a commander and staff in order to give greater context to situational understanding; it does not adequately discuss the dynamics of the mission analysis process in interaction with various commander personalities; and it does not adequately suggest how to assist a commander in getting information before mission analysis while he is developing his intent and guidance.

---

<sup>51</sup> *FM 101-5, Staff Organization and Operations*, 5-27: Under the heading, Decision Making in a Time-Constrained Environment, the text reads- "There is still only one process, however, and omitting steps of the MDMP is not the solution. Anticipation, organization, and prior preparation are the keys to success in a time-constrained environment."

## **Convey Understanding on Mission Analysis Design**

Chapter five of FM 101-5 does not fully convey to the reader the over-arching principle of mission analysis. Although it states that the mission analysis “...allows the commander to begin his battlefield visualization,”<sup>52</sup> it does not stress how mission analysis accomplishes this. The readers are left to discover this themselves through their own trial and error and self-discovery. The text does not fully describe what the staff is attempting to do in relation to what the commander needs from them; it starts with one small explanatory paragraph, and then launches into the seventeen steps. Mission analysis is a proven analytical process, but it is not fully promoted within the doctrinal writing. Commanders and staffs are required to simply accept it and use it. There is very little explanation of how the process fits human decision making theory and why it is a good process for defining a problem.

### **Framing the Problem**

The mission analysis process does a good job of focusing a staff on collecting information for the commander. However, it fails to adequately explain how to frame the problem for the commander to give him the context he needs and to expand his initial intent and guidance. Every commander is different, but there are several pieces of information they all need in order to gain adequate context to complete their initial intent and guidance. As described in chapter two, mission analysis provides eleven pieces of key understanding for the commander. Providing the information is one thing, analyzing and arranging it to provide context is another matter. This takes great skill and insight on the part of the staff and is arguably the most important thing they will do for the commander during mission analysis.

The mission analysis brief should present, not only the relevant conclusions of the staff’s analysis, but present it in an organized manner that elevates the commander’s understanding of

---

<sup>52</sup> FM 101-5, *Staff Organization and Operations*, 5-5.



the situation beyond what he originally conceived. If the commander does not adequately visualize the battlefield and define the tactical problem correctly, his stated intent, guidance, and future decisions will be discordant with reality. The current mission analysis brief is not set up to help the staff convey context from their findings to assist the commander complete his intent and guidance. It offers a method to present tremendous amounts of information, but this method fails to adequately frame the problem in relation to purpose, time, space, and resources. If the staff can outline the conduct of the operation over time, they can begin to frame the required space and resources of the operation in relation to time. They also begin to see or discern the various problems with the allotted space or the resources on hand in relation to the purpose of the operation and the given time. Executing the mission analysis steps helps a staff collect this information, but the doctrine does not provide a method to complete the effort and present this information in context for the commander and the staff. The staff is left with information and only their own intuition on how to package it for the commander.

### **Interaction with Commanders**

The mission analysis does not reflect the dynamic nature of command personalities and the various manners in which commanders give, receive, and think about information. Getting to know how the commander gives information, receives information, and thinks about information is a key factor in the success of the mission analysis and the mission analysis brief. The staff must learn their commander's methods of speech. Is he direct or indirect, literal or requires much interpretation? Failure to adapt to the commander's mode of expressing his thoughts will often render the staff paralyzed attempting to interpret the commander's directives. The staff must understand the best medium in which their commander receives information, what is important to him, and how he sees things. If the staff cannot convey the relevant conclusions from their analysis to the commander, they will fail in assisting him reach any greater battlefield visualization. Whether he likes PowerPoint slides or butcher board paper, anything contrary with

how he receives information will distract him away from the central message. If the staff is analyzing information that is irrelevant to their commander, then they are wasting time. The staff must understand that they must adapt to the commander, and not the other way around.

The only way for the commander to use the relevant conclusions from the staff's mission analysis, and then incorporate this understanding into his intent and guidance, is to get the findings before the mission analysis brief or take time afterward, to digest and analyze what he has just heard, before issuing his intent and guidance. To do otherwise is an indictment that the staff's work has not elevated the commander's understanding of the situation beyond what he has deduced from his own estimate. The staff must understand the commander's blind spots, weaknesses, those areas where he lacks relevant experience or understanding. How does the staff ensure those with the proper relevant experience are part of the planning staff? This assessment must be made before the commander and staff begin the process or the frustrations of all will be evident as the commander cannot seem to get what he wants from his staff. The commander must spend time getting to know his staff. He must spend time with the various BOS elements so he learns how they interpret his words and act on his guidance.

### **Collaborative Planning**

Throughout the seventeen steps of mission analysis, the doctrinal text often states, "...the commander and staff..." and then mentions some action for both to accomplish. This does not imply that the commander and the staff must work the step together, but that they both must execute the action. If the intent were for the commander to use his own work to check the staff's work, then executing the analysis as two separate, and isolated estimates (commander's estimate and the staff estimates) would suffice to accomplish this. However, if the intent is to use the staff to increase the efficiency and timeliness of the commander's estimate and give him access to various staff products before the mission analysis brief, then some form of commander and staff collaboration is in order. The mission analysis brief should focus on answering or framing the

options available within the context of assisting the commander in writing his intent and providing guidance.

Our doctrine describes the Commander's Estimate and the Staff Estimates as two separate and continual processes.<sup>53</sup> When one looks at the true nature of what is occurring in the mission analysis process, it should be apparent that the staff is working for the commander and not for the process. However, the way the doctrine is written leaves one to believe the staff works the process and the commander shows up for briefs to check on what they have been doing. It even mentions that the commander does his own separate mission analysis so that he has a frame of reference to assess the staff's work.<sup>54</sup> This concept leads staffs astray from the essential reason they are working on the mission analysis and tends to focus them more on the process and less on assisting the commander to rapidly develop his battlefield visualization. Since time is always a scarce commodity, there should be an emphasis on finding out what the commander needs and focusing the staff on fulfilling those needs. Some commanders know what they want and direct the staff to focus specifically on those key pieces of understanding they are missing. Some have tremendous amounts of experience and simply want the staff to find and present the missing parts to pre-described patterns recognizable with his experience. Some commanders are very directive on what they want, while others expect the staff to assist them as they mature their thoughts and intent. Some will work on enabling the staff to get inside their heads, others do not want anyone to be able to figure them out. Some simply want good staff estimates, and they will figure it out themselves. Some know the enemy extremely well, and others, the terrain.<sup>55</sup>

---

<sup>53</sup> *FM 101-5, Staff Organization and Operations*, 5-1 to 5-2 (Figure 5-1).

<sup>54</sup> *FM 101-5, Staff Organization and Operations*, 5-5

<sup>55</sup> Personal interviews: Burba, Barth, Cavazos, Crouch, Fontenot, Franks, Grange, Greczyn, Greer, Leyden, Lindsay, and Miller: The response to the question of what a commander needed in order to develop timely, relevant, and constructive commander's intent and guidance varied considerably. The diversity in answers reflected the diversity in personalities and how they received information, thought about information, and gave information. The various personalities reflected varied approaches to commander-staff interaction, methods of extracting information they desired from a staff, and how they had information presented to them.

The doctrinal process for mission analysis is incomplete in its design description, explanation of framing a problem, description of commander-staff interaction, and collaborative planning. If the U.S. Army takes no action to mitigate this problem, these four areas will continue to have negative impacts on commanders, staffs, and U.S Army doctrine.

### **Impact of the Problems**

The immediate impact, if no change is made to the doctrinal process for mission analysis, is continual frustration on the part of commanders and staffs as they struggle with striving to achieve battlefield visualization in a short time period. Commanders will continue to feel the frustration of more mission analysis briefs that do not add much to what they already understand about the situation. Commanders will continue to struggle through intent and guidance development on their own with relatively little help from their staff. Staff officers will continue to be frustrated with unfocused guidance from their commander, inadequate shared battlefield visualization with the commander, and executing a process that does not optimize efficiency with their particular commander.

The long-term impact, if no change is made to the doctrinal process for mission analysis, is a continual erosion of support for it from the officer corps Army-wide. A review of the numerous professional U.S. Army and military journals reveals a large segment of the officer population that believes the MDMP is a slow, inflexible, cumbersome process that needs to be done away with. Many wish to do away with the process and replace it with a variety of suggestions. Many of those writing fail to see the value of the analytical process and the educational value it has on teaching future planners how to think, not what to think. Due, in part, to the method of its writing, the doctrine does not promote itself or explain how it supports current decision making theory in the ever changing, high tempo environment of the future.

This chapter examined the evidence from the mission analysis trends in relation to the evaluation criteria and discussed the problems and impacts associated with mission analysis and

commander's intent/guidance development. It determined that the problems with the current process of mission analysis and development of the commander's intent and guidance are threefold. First, the current process fails to take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs present the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance. Commanders and staffs will continue to feel the frustration of mission analysis briefs that do not help add context to their current understanding of a situation and support for the doctrinal and analytical approach of mission analysis will continue to erode. The process needs to be improved and the following chapter presents a solution to mitigate the problems identified.

## CHAPTER FIVE

### **A Proposal**

#### **Research Question Answered**

This chapter answers the research question, explains the fundamental problems the mission analysis fails to address in doctrine, describes how this failing leaves our doctrine incomplete, and proposes solutions to mitigate this incompleteness and increase the efficiency of the staff to give commanders what they need during the mission analysis process.

Although there is little effect on the timeliness of commander's intent and guidance, the current U.S. Army doctrinal process for executing mission analysis, as outlined in FM 101-5 (Staff Organization and Operations), does not give commanders the information they need to develop relevant and constructive commander's intent and commander's guidance. The current mission analysis process is a solid, analytical, doctrinal approach, however, the assumptions made about the personnel executing it, the manner in which U.S. Army doctrine describes the process, and the method it uses for execution are inadequate to fully assist commanders and staffs develop a shared vision of the requirements for the upcoming operation.

In its current form, the mission analysis process fails to address three fundamental problems that commanders and staffs struggle with during the execution of mission analysis: lack of relevant experience, inadequate understanding of the process design, and inadequate presentation of the findings. First, it does not take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs to present the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance.

Failure to address these three fundamental problems reveals that the mission analysis process is incomplete in four areas: it fails to fully convey understanding to staffs as to what mission analysis is designed to do; it does not adequately explain how to frame a problem for a commander and staff in order to give greater context to situational understanding; it does not adequately discuss the dynamics of the mission analysis process in interaction with various commander personalities; and it does not adequately suggest how to assist a commander in getting information before mission analysis while he is developing his intent and guidance.

The following sections provide a feasible solution which addresses the fundamental problems of mission analysis and improves the process. In addition to describing how to mitigate the impact of inexperience, these sections explain the proposals on how to improve understanding of mission analysis design, execution and understanding of framing a problem through context, recognition of the impact of commanders on the process, and collaborative planning with the commander during the process.

### **Mitigating Lack of Relevant Experience**

Until changes in U.S. Army personnel policy address the need to manage leader assignments (commissioned and non-commissioned officers) to give greater opportunity to gain relevant experience at the tactical level for longer periods, leaders will continue to suffer the frustration of inefficiency due to a lack of context with the issues at hand. Chapter three, “Mission Analysis in the Field,” demonstrates this frustration and inefficiency. In today’s Army, very few officers have the opportunity to command two companies, let alone multiple battalions or brigades. Even when an officer commands two companies, they are usually only for twelve months at a time (as opposed to eighteen months for one command). Just when the officer begins to achieve some level of proficiency with the company, they move to command another (usually a Headquarters and Headquarters Company). Even within staff positions, officers today have limited opportunity to work beyond two branch-qualifying positions. The current needs of the Army are too great

and the number of personnel too small to allow everyone so many opportunities. As mentioned in the previous chapter, solving this problem is not within the scope of this paper. However, this section describes the several measures the Army can take to mitigate the negative effects of inexperience.

Using a doctrinal, analytical approach is one measure. The Army uses this approach in the current mission analysis. As mentioned in chapter two, a doctrinal approach to mission analysis expresses to all personnel in the organization the method to use when executing the task. This facilitates communication among soldiers, contributes to shared professional culture, and serves as the basis for curricula in the U.S. Army Education System in order to teach the mission analysis process to all soldiers. An analytical approach is inherently more applicable to structured teaching and foundational understanding for professionals learning their craft. Educating leaders in the theory, history, and doctrine of warfare offers a baseline to the science of planning and later acts as the foundation to the art of planning as the leader grows in experience and judgment.

Another measure is for commanders to assist in mitigating inexperience by focusing the efforts of the staff's research during mission analysis. Commanders can decrease the amount of information an inexperienced staff needs to research and focus them on key pieces of information he requires for greater context. Commanders can also develop preformatted information cards that provide status reports and information formats suitable to the commander, which decreases the amount of analysis on the part of the staff.

A third measure is explaining, in the doctrine, the complex and systems nature of reality.<sup>56</sup> A section in the future FM 5-0's (Army Planning and Orders Production) chapter for the MDMP, should describe the complex nature of the environment military problems exist in and the concept

---

<sup>56</sup> The nature and details of complexity theory and systems thinking are described in detail by numerous authors. FM 5-0 would be well served if it focused its research and discussion on three main authors: Dietrich Doerner: *The Logic of Failure*, Peter M. Senge: *The Fifth Discipline*, and M. Mitchell Waldrop: *Complexity*.



of systems thinking. This description would emphasize to staff members to focus beyond the current and obvious information and think about relevant second/third order effects. A soldier-level synopsis of complexity and systems thinking would help focus a staff member's intellect on analyzing situations closer to the reality in which they actually exist. Merely pointing out and emphasizing that war, operations, even specified tasks, are complex systems with many independent agents that interact with each other in numerous ways, would assist an inexperienced staff member in looking beyond the obvious factors of a specified task, or perhaps envision an implied task. Having doctrine emphasize military situations as disorderly and alive complex systems may help staff members picture it that way in their heads, even if they have not had the experience. Emphasizing these concepts in the doctrine and understanding the complex, systems nature of the environment in which operations exist could help curb some of the negative effects of inexperience.

A fourth measure to mitigate inexperience is for leaders to master the mission analysis process and internalize its principles so that it becomes second nature to them. When the mental paralysis takes hold of a staff due to inevitable time constraints, creative thought rapidly disintegrates. Those without the intuition for what action to take next will fall back on what they have internalized to assist them to an adequate answer. It is important then, that what a leader internalizes is reliable and accurate to accomplish the job. The current mission analysis is not getting the job done. However, the following section's proposal offers solutions to render the process more complete and truer to its intended design.

### **Explaining the Mission Analysis Design**

The future FM 5-0 should dedicate a section to explain the research on how commanders make decisions when faced with situations they recognize and those they do not. By understanding how a commander makes decisions in naturalistic environments, a staff can be more efficient in finding and presenting the type of information he needs in order to complete his

pattern recognition. FM 5-0 should address the manner in which the lack of relevant experience drives leaders to use an analytical process in order to work their way through a problem. Also, the section should explain how leaders with tremendous amounts of relevant experience still need to gather information about a problem so that they can identify patterns they recognize and can act on. The mission analysis process is the same in either instance. The changing dynamic is the amount and type of information the commander requires from the staff before he is capable of making a decision. By addressing the issue of how the analytical, doctrinal process is the same, the manual can help quiet the critics and focus the discussion on making the process better, not getting rid of it.

Author Gary Klein's *Sources of Power: How People Make Decisions*, would be an excellent point of departure for FM 5-0 to address naturalistic decision making, or how people use their experience to make decisions in field settings. He describes the model of Recognition-Primed Decisions (RPD), a fusion of two processes: the way decision makers size up the situation to recognize which course of action makes sense, and the way they evaluate that course of action by imagining it.<sup>57</sup> The model explains how people can use experience to react rapidly in naturalistic settings and make good decisions without having to contrast options.<sup>58</sup> He states that experienced decision-makers, in settings with patterns they quickly recognize, intuitively know what to do without a formal or lengthy process of decision-making. Taken out of the setting with recognizable patterns, decision-makers require more rational choice models that are more analytical in nature. The commander's intuition depends on the use of experience to recognize key patterns that indicate the dynamics of the situation. The less relevant experience, ability, and judgment, the more decision-makers rely on the analytical, rational choice approach. The mission analysis process, although analytical, can serve in both types of circumstances. The staff must figure out what steps it can intuitively do faster, and which steps need a more analytical and

---

<sup>57</sup> Gary Klein, *Sources of Power: How People Make Decisions*, 24.

<sup>58</sup> Gary Klein, *Sources of Power: How People Make Decisions*, 101.

thorough approach. Once they complete the steps and gain the required understanding, they must frame the understanding in a manner discernable to the commander.

### **Framing the Problem through Context**

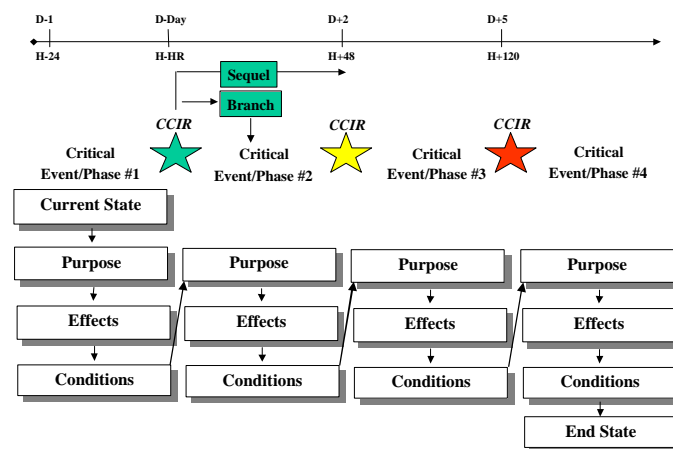
The future FM 5-0 should describe how the staff must frame the problem through context for the commander during mission analysis. Adequately framing the problem through context requires describing the purpose of the operation over time in relation to space and resources. The staff must do this early in the mission analysis. The staff should gain the information required from steps one through four of mission analysis<sup>59</sup> and then come together to frame the initial findings of the problem (mission).

The staff must outline the conduct of the operation over the given timeline. This consists of the analysis of the friendly situation on a map (crude generic sketch of the friendly forces and their assigned tactical tasks) and the initial analysis of the enemy situation (enemy situational template from higher would suffice) to show the dynamics of the space (graphics from higher) in relation to resources (own and friendly forces) and the enemy. The staff should list the resources available in relation to the space and time (when and where certain resources are gained or lost, etc). The staff can then continue the mission analysis steps with unified context. This will place the area of operations and the area of interest in context with the timeframe of the mission (when do certain boundaries change, when does the unit gain/lose maneuver space, control measures, etc). It will also outline the generic lines of operation that the unit must physically occupy in order to execute the mission. It helps each staff member identify space and resource problems/shortfalls for their BOS while they are conducting mission analysis. Initially outlining this generic information for the staff will give them time, space, and resources to analyze, and as a result, substance for their estimates.

---

<sup>59</sup> Steps one through four of the mission analysis consists of: analyze the higher headquarters' order; conduct initial intelligence preparation of the battlefield; determine specified, implied, and essential tasks; and review available assets.

After determining the tentative timeline for the operation, the staff must start from the perceived endstate and work their way backwards discerning the conditions required to achieve the endstate, the effects (later to become tasks) required to achieve those conditions, and then the reason, or purpose, that the unit is creating the effects or executing the tasks. The staff displays this information in relation to the tentative timeline for the operation. The staff must also recognize that decision points are required between the events/phases which will require CCIR to assist the commander know when he has met the conditions of one event/phase and needs to transition into the next. The decision may also be that a sequel or branch is required due to changing events on the battlefield. Even though the staff may not be able to completely define the decision until COA development or COA analysis (wargaming), understanding that the commander needs to make a decision in relation to the purpose, effects, and conditions of the current event/phase gives him greater context to his thinking. The staff gathers all of this information from the first four steps of the mission analysis. Eventually the staff will be capable of displaying their current state, the purpose in each major event or phase, and the effects or tactical tasks they must achieve in order to create the require conditions to reach their endstate or the conditions for the next event/phase (see figure 5-1).



**Figure 5-1: Framing the Problem through Context**

The staff can visualize during the rest of the mission analysis how their estimates fit into the whole of the mission. This now assists the staff to conduct their estimates in context with time, space, and resources, not abstract concepts. Relevant problems become apparent and the staff creates their estimates relative to those problems. As the estimates mature, they add context to the initial framing of the problem and create greater definition for the staff. This will eventually evolve into the centerpiece of the mission analysis brief and the staff can filter this information to the commander simultaneously while he works on his commander's estimate. With this lay-out, the greater experience and intuition of the commander is optimized and issues the staff could not discern due to their own inexperience, become very evident to the commander. If there is time available before the mission analysis brief to the commander, the staff should come together again to update their findings for all to consider. They must also ensure they have designed the brief to take into account the manner in which the commander receives and interprets information.

### **Explaining the Impact of Commanders**

The future FM 5-0 should describe the dynamics of commander-staff interaction and their impact on mission analysis. The staff should understand that they must adapt to the commander, and not the other way around. It is important for the commander and staff to find out early how they will work through the mission analysis process. The commander and staff must work out the details of the entire briefing format, method of brief, and various peculiarities of the commander if the mission analysis is to obtain the desired effect. The staff must discover how their commander expresses himself, receives information, and interprets information.

The commander should look for every opportunity to talk with various sections of the staff, discuss his command philosophy, and find means of which to allow the staff insights into how he thinks and sees things. The only way for the commander to use the relevant conclusions from the staff's mission analysis, and then incorporate this understanding into his intent and guidance, is

take some time after the mission analysis brief to digest and analyze what he has just heard. To do otherwise is an indictment that the staff's work has not elevated the commander's understanding of the situation beyond what he has deduced from his own estimate. However, if the commander could gain access to the staff's products or findings beforehand, he could save time during the development of his own estimate or gain greater context before the mission analysis brief.

### **Collaborative Planning with the Commander**

The future FM 5-0 should describe the nature and need for commander-staff collaborative planning. The doctrine should address the benefits of information sharing between the commander and staff before the mission analysis brief. The staff must understand this dynamic before they begin mission analysis and determine how to adjust their thinking, actions and the process for their commander.

Depending on how a particular commander receives and thinks about information, the staff should be prepared to adjust and prioritize their staff work in order to feed the commander what he needs before the mission analysis brief. This will facilitate a reduction in the time spent on his estimate and better equipped him to provide his initial intent and guidance. The commander should make his initial guidance (during receipt of mission) very clear as to what he needs prior to the mission analysis brief. Updating his initial guidance throughout the mission analysis process enables the staff to further refine their estimates so they are more focused on what the commander needs for completion of his intent/guidance development. Not only will collaborative planning save time for the commander, it should also get him the key information he needs before the mission analysis brief.

## **Conclusion**

This paper focused on the first two aspects of battle command: visualization and description. There are problems with the doctrinal mission analysis process that hinders commanders and their staffs in visualizing and describing an operation. The over-arching problem occurring during execution of the current mission analysis process is that staffs are not giving commanders what they need to complete their required deliverables at the conclusion of the mission analysis brief: timely, relevant, and constructive initial commander's intent and commander's planning guidance.

In its current form, the mission analysis process fails to address three fundamental problems that commanders and staffs struggle with during the execution of mission analysis. First, it does not take into account the lack of sufficient relevant experience of most staff members to intuitively see the relevant conclusions from the information gathered by the process. Second, it does not adequately describe the complex nature of the commander and staff relationship and how the staff uses each step of the mission analysis process to assist the commander. Lastly, the mission analysis process does not assist staffs with presenting the information gathered from the process in a manner that properly frames the problem and relates proper context to the commander in order to facilitate the development of his intent and guidance.

Until changes in U.S. Army personnel policy address the need to manage leader assignments (commissioned and non-commissioned officers) to give greater opportunity to gain relevant experience at the tactical level for longer periods, leaders will continue to suffer the frustration of inefficiency due to a lack of context with the issues at hand. However, this paper proposed several methods commanders and staffs could use to mitigate for lack of relevant experience.

As for the other two problems, the mission analysis construct is good, but not complete. The current doctrine for mission analysis is incomplete in four areas: it fails to fully convey understanding to staffs as to what mission analysis is designed to do; it does not adequately

explain how to frame a problem for a commander and staff in order to give greater context to situational understanding; it does not adequately discuss the dynamics of the mission analysis process in interaction with various commander personalities; and it does not adequately suggest how to assist a commander in getting information before mission analysis while he is developing his intent and guidance.

The future FM 5-0 should dedicate a section to explain the research on how commanders make decisions when faced with situations they recognize and those they do not. By understanding how a commander makes decisions in naturalistic environments, a staff can be more efficient in finding and presenting the type of information he needs in order to complete his pattern recognition.

The future FM 5-0 should describe how the staff must frame the problem through context for the commander during mission analysis. Adequately framing the problem through context requires describing the purpose of the operation over time in relation to space and resources.

The future FM 5-0 should describe the dynamics of commander-staff interaction and their impact on mission analysis. The staff should understand that they must adapt to the commander, and not the other way around. The staff must discover how their commander expresses himself, receives information, and interprets information.

The future FM 5-0 should describe the nature and need for commander-staff collaborative planning. The doctrine should address the benefits of information sharing between the commander and staff before the mission analysis brief. The staff must understand this dynamic before they begin mission analysis and determine how to adjust their thinking, actions and the process for their commander.

The mission analysis process is a solid, analytical, doctrinal approach, however, the assumptions made about the personnel executing it, the manner in which U.S. Army doctrine describes the process, and the method it uses for execution are inadequate to fully assist commanders and staffs in developing a shared vision of the requirements for the



upcoming operation. This paper has not only identified problems with the current doctrinal process, but it has provided solutions to mitigate them. If the proposal of this paper is implemented in the future FM 5-0 (Army Planning and Orders Production) the U.S. Army could greatly improve the effectiveness of the mission analysis process and improve shared battlefield visualization and description by commanders and their staffs.

## Bibliography

### Books

- Berube, Margery S. Director of Editorial Operations. *The American Heritage Dictionary*. New York: Dell Publishing, 1989.
- Gates, Bill. *Business @ the Speed of Thought: Succeeding in the Digital Economy*. New York: Warner Books Inc., 2000.
- Klein, Gary. *Sources of Power*. Massachusetts Institute of Technology, 1998.
- McClean, Norman. *Young Men and Fire*. Chicago: University of Chicago Press, 1992.
- Strunk, William. and White, E. B. *The Elements of Style*. New York: MacMillan Publishing Co., 1979.
- Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. Chicago: University of Chicago Press, 1996.

### Articles and Periodicals

- Ancker, Clinton. "Military Decision Making Process (MDMP)." Center for Army Lessons Learned, <http://call.army.mil/products/nftf/janfeb98/mdmp.htm>.
- Anderson, Walter N. "Commanders Intent- Theory and Practice." *Armor* (May-June, 1998).
- Antal, John F. "Commander's Guidance for Battle Command." *Armor* (May-June, 1995), 30-34.
- Banner, Gregory T. "Decision Making – A Better Way." *Military Review* (September-October 1997), 53-55.
- Bennett, Drew A. "Philosophy of Command and Commander's Guidance." *Infantry* (March-April, 1991), 13-15.
- Benson, Kevin C. M. "Commander's Intent: Providing the Focus for Operations." *Infantry* (March-April, 1994), 15-17.
- Bralley, Neal H. "Improving Battle Command Skills: The Brigade Command and Battle Staff Training Program." *Military Review* November-December 1995): 49-52.
- Brown, Thomas E. "Commander's Guidance." *Military Review* (April 1994), 63-69.
- Dotterer, Joel C. "Commander's Intent: Less is Better." Center for Army Lessons Learned, [http://call.army.mil/products/ctc\\_bull/98-24/98-24ch1.htm](http://call.army.mil/products/ctc_bull/98-24/98-24ch1.htm).
- Ettore, Michael L. "Commander's Intent Defined." *Marine Corps Gazette* (April 1994), 52-53.

- Hall, John D. "Decision Making in the Information Age: Moving Beyond the MDMP." *Field Artillery Journal* (September-October 2000), 28-32.
- Harris, Sean. "The Battalion Fire Support Officer and Mission Analysis." Center for Army Lessons Learned, [http://call.army.mil/products/ctc\\_bull/97-18/art6ctc.htm](http://call.army.mil/products/ctc_bull/97-18/art6ctc.htm).
- Gonsalves, James D. "Tactical Decision Game (TDG): An Invaluable Training Tool for Developing Junior Leaders." *Armor* (May-June 1997), 35-38.
- Jocz, Norbert B. "The Accelerated Task Force Decision-Making Process." *Infantry* (November-December 1996), 33-36.
- Natsios, Andrew S. "Commander's Guidance: A Challenge of Complex Humanitarian Emergencies." *Parameters* (Summer 1996), 50-66.
- Naylor, Sean D. "Balkan Primer- Mission Analysis: Quagmire." *Army Times*, Vol 53, No 43 (May 24, 1993).
- Paparone, Christopher R. "U.S. Army Decisionmaking: Past Present, and Future." *Military Review* (July-August 2001).
- Rees, Richard and Sorrell, Steve. "Techniques to Shorten the Decision-Making Process at the Task Force Level." *Armor* (July-August 1997), 41-45.
- Shattuck, Lawrence G. "Communicating Intent and Imparting Presence." *Military Review* (March-April 2000), 66-72.
- Walach, Christopher E. "NTC Decision Making – The Dilemma." Center for Army Lessons Learned, <http://call.army.mil/products/newsletters/01-7/01-7ch1.htm>.
- Wyte, Joseph. "Mission Analysis: Getting It Right." Center for Army Lessons Learned, <http://call.army.mil/products/trngqtr/tq4-98/wyte.htm>.

### **Government Documents**

- U.S. Army. *FM 3-0, Operations*. Washington DC: Department of the Army, 2001.
- \_\_\_\_\_. *FM 25-100, Training the Force*. Washington DC: Department of the Army, 1988.
- \_\_\_\_\_. *FM 25-101, Battle Focused Training*. Washington DC: Department of the Army, 1990.
- \_\_\_\_\_. *FM 101-5, Staff Organization and Operations*. Washington DC: Department of the Army, 1997.
- \_\_\_\_\_. *FM 101-5-1, Operational Terms and Graphics*. Washington DC: Department of the Army, 1992.
- US Department of Defense. *Joint Publication 1-02: Department of Defense Dictionary of Military and Associated Terms*. Washington DC: Government Printing Office, 1994.

### **Monographs, Reports, Unpublished Works, and Videos**

- Burwell, David W. "Logical Evolution of the Military Decision Making Process." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2001.
- Conroy, J. "Potential Predictors of Battalion Task Force Performance Effectiveness at the National Training Center." Research Report, Science Applications International Corps, McLean, VA, 1985.
- Danikowski, David A. "Personality and the Planning Process." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2001.
- Dyer, J. L. "Light Infantry Performance at the Combat Training Centers: Home-Station Determinants." Research Report 9233, Army Research Institute Field Unit at Fort Benning, FA, 1992.
- Johnson, Phillip M. "Effects of Group Think on Tactical Decision Making." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2001.
- Leonard, Steven M. "Clausewitz, Complexity, and Custer: An analysis of Decision Making in a Nonlinear System." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2001.
- Marr, John J. "The Military Decision Making Process: Making Better Decisions Versus Making Decisions Better." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2001.
- McFann, Howard H. and Richard K. Williams, Jr. "National Training Center, Joint Readiness Training Center, and Home Station-Based Research Program Products." Research Report 1440, Army Research Institute Field Unit at Presidio of Monterey, CA, 1987.
- Quillin, Tim W. "The Staff Responsibility to Help the Commander Develop His Vision." Monograph, School of Advanced Military Studies. Fort Leavenworth, KS, US Army Command and General Staff College, 2000.
- U.S. Naval War College, "Sound Military Decision." Newport, RI, U.S. Naval War College, 1942.
- Wan, Ng Kok. "Using Decision Trees to Direct the Planning Thought-Process: An Enhancement to the Planning Methodology." Unpublished Master's Degree Thesis, Fort Leavenworth, KS, 1995.
- United States Army, NTC. "OC Observations on Staff Planning." Video G001721, 1996.

### **Interviews**

GEN (R) Burba, Edwin H. Jr., Personal Interview, 14 February 2002

GEN (R) Cavazos, Richard E., Personal Interview, 12 December 2001.

GEN (R) Crouch, William W., Personal Interview, 30 January 2002.

GEN (R) Franks, Frederick M. Jr., Personal Interview, 13 February 2002.

GEN (R) Lindsay, James J., Personal Interview, 30 January 2002.

LTG (R) Grange, David E. Jr., Personal Interview, 17 January 2002.

COL (R) Fontenot, Gregory, Personal Interview, 14 February 2002.

COL Greczyn, Norman, Personal Interview, 12 December 2001.

COL Greer, James K., Personal Interview, 18 December 2001.

COL (R) Leyden, Richard G., Personal Interview, 7 January 2002.

COL Miller, William J. A., Personal Interview, 18 December 2001.

LTC Barth, Frank L., Personal Interview, 7 January 2002.